

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR2004/002687

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 H04B 1/38**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

H04B 1/38, A45C 11/00, H04M 1, H05K 5/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KR 2000-10498 A(HONG JONG-HEE) 15 FEBRUARY 2000 see the hole document	1
A	KR 295589 Y(PARK KYUNG-JIN) 18 NOVEMBER 2002 see the hole document	1
A	KR 2000-6575 U(AHN KWANG-HYUN) 15 APRIL 2000 see the hole document	1
A	KR 323926 Y(KIM TAEKYUNG) 21 AUGUST 2003 see the hole document	1
A	JP 10-326974 A(OZAKI AKIHIKO) 08 DECEMBER 1998 see the hole document	1
A	JP 3075188 U(POWERHOUSE CO.,LTD) 15 NOVEMBER 2000 see the hole document	1
A	JP 11-298362 A(SONY CORP) 29 OCTOBER 1999 see the hole document	1

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents:	
"A"	document defining the general state of the art which is not considered to be of particular relevance
"E"	earlier application or patent but published on or after the international filing date
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
"O"	document referring to an oral disclosure, use, exhibition or other means
"P"	document published prior to the international filing date but later than the priority date claimed
"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&"	document member of the same patent family

Date of the actual completion of the international search

25 FEBRUARY 2005 (25.02.2005)

Date of mailing of the international search report

28 FEBRUARY 2005 (28.02.2005)

Name and mailing address of the ISA/KR



Korean Intellectual Property Office  
920 Dunsan-dong, Seo-gu, Daejeon 302-701,  
Republic of Korea

Faxsimile No. 82-42-472-7140

Authorized officer

KIM, Dong Sung

Telephone No. 82-42-481-5949



BEST AVAILABLE COPY

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/KR2004/002687

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
KR 2000-10498 A	15.02.2000	None	
KR 295589 Y	18.11.2002	None	
KR 2000-6575 U	15.04.2000	None	
KR 323926 Y	21.08.2003	None	
JP 10-326974 A	08.12.1998	None	
JP 3075188 U	15.11.2000	None	
JP 11-298362 A	29.10.1999	None	

BEST AVAILABLE COPY